INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/09808

A. CLASSIFICATION OF SUBJECT MATTER IPC: F16L 9/14(2006.01),9/16(2006.01),59/16(2006.01)				
USPC: 285/47,123.3,123.15;138/113,114,149 According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIELDS SEARCHED				
Minimum documentation searched (classification system followed by classification symbols) U.S.: 285/47, 123.3, 123.15, 904, 123.1; 138/113, 114, 149, 112, 148				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)				
C DOCIMENTS CONSIDERED TO BE DELEVANT				
	C. DOCUMENTS CONSIDERED TO BE RELEVANT Category Citation of document, with indication, where appropriate, of the relevant passages			
X	US 3,865,145 A (MCKAY et al) 11 February 1975 (11.02.1975), see entire document.			Relevant to claim No.
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Further documents are listed in the continuation of Box C. See patent family annex.				
Special categories of cited documents: A document defining the general state of the art which is not considered to be of particular relevance		"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the		
		principle or theory underlying the invention		
"E" earlier ap	plication or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone		laimed invention cannot be ed to involve an inventive step
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination		
	at referring to an oral disclosure, use, exhibition or other means	being obvious to a person skilled in the art		
	document published prior to the international filing date but later than the "&" document member of the same patent family priority date claimed			family ·
Date of the actual completion of the international search 26 December 2007 (26.12.2007)		O 6 FEB 2008,		
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Form PCT/ISA/210 (second sheet) (April 2005)